

PHILADELPHIA & READING RAILROAD, MULE BRIDGE
Pennsylvania Historic Railroad Bridges Recording Project
Spanning Schuylkill River at foot of Shurs Ln.
Philadelphia
Philadelphia County
Pennsylvania

HAER No. PA-552

HAER
PA
51-PHILA,
727-

PHOTOGRAPHS

XEROGRAPHIC COPIES OF COLOR TRANSPARENCIES

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
1849 C Street, NW
Washington, DC 20240

HISTORIC AMERICAN ENGINEERING RECORD
PHILADELPHIA & READING RAILROAD, MULE BRIDGE

HAER
PA
SI-PHILA
727-

HAER No. PA-552

Location: Spanning Schuylkill River at foot of Shurs Ln., between Philadelphia, Philadelphia County, and West Manayunk, Montgomery County, Pennsylvania.

USGS Quadrangle: Germantown, Pennsylvania (7.5-minute series).

UTM Coordinates: 18/481235/4429955

Date of Construction: 1889.

Basis for Dating: Secondary sources.

Date of Alteration: 1943.

Designer: Unknown.

Fabricator / Builder: A. & P. Roberts, agents for Pencoyd Bridge & Construction Co. (Pencoyd, Pa.).

Present Owner: Norfolk Southern Railroad.

Present Use: Railroad bridge.

Structure Type: Wrought-iron lattice deck girder; half-through plate girder.

Significance: The Mule Bridge is one of Philadelphia's oldest metal railroad bridges, and a rare surviving example of a wrought-iron lattice truss.

Historian: Justin M. Spivey, April 2000.

Project Information: The Historic American Engineering Record (HAER) conducted the Pennsylvania Historic Railroad Bridges Recording Project during 1999 and 2000, under the direction of Eric N. DeLony, Chief. The project was supported by the Consolidated Rail Corporation (Conrail) and a grant from the Pennsylvania Historical and Museum Commission (PHMC). Justin M. Spivey, HAER engineer, researched and wrote the final reports. Preston M.

PHILADELPHIA & READING RAILROAD, MULE BRIDGE
HAER No. PA-552
(Page 2)

Thayer, historian, Fredericksburg, Virginia, conducted preliminary research under contract. Jet Lowe, HAER photographer, and Joseph E. B. Elliott, contract photographer, Sellersville, Pennsylvania, produced large-format photographs.

Description and History

The Philadelphia & Reading (P&R) Railroad's Mule Bridge, built in 1889, takes its name from the 1818 wooden structure that it replaced. Whereas the first Mule Bridge carried the Schuylkill Navigation Company's canal towpath, its successor was built for a freight railroad, the P&R's Venice Branch. This single-track line connects the lower tier of Manayunk to the P&R main line on the west bank of the Schuylkill River, and still carries freight traffic at present.¹

The bridge is 623'-0" long, with an S-curve alignment. At its south end, the Venice Branch rises from the main line on an earth embankment heading northwest. The bridge begins with 93'-0" and 55'-0" half-through plate girders, the longer of which spans a spur track that formerly served the Pencoyd Iron Works.² Curving north, the half-through girders are followed by a deck plate girder, then two 93'-0", one 92'-0", and two 78'-0" spans, all riveted wrought-iron lattice deck girders on stone piers. The bridge begins curving northwest again at a particularly massive pier between the 92'-0" span and the first 78'-0" span. Subsequent changes include repairs to the west abutment in 1913, removal of the pedestrian walkway in 1943, and repair of bottom chord damage to the 92'-0" lattice girder in 1972.³

Notes

1. John Bowie, ed., *Workshop of the World: A Selective Guide to the Industrial Archeology of Philadelphia* (Wallingford, Pa.: Oliver Evans Press, 1990), 7.30.
2. The Pencoyd spur crosses the Schuylkill on the next bridge downstream, still known as the Pencoyd Bridge, leading into the plant itself. The Pencoyd Bridge and the Mule Bridge were both fabricated at this plant.
3. Milepost 0.07, region/division/branch 100361, aperture card files, Consolidated Rail Corporation, Philadelphia, Pa. [transferred to Norfolk Southern Railway Co., Atlanta, Ga.].

Additional Source

1. Interstate Commerce Commission, Bureau of Valuation, Engineering Field Notes, Philadelphia & Reading Railroad, Box 72, RG 134, National Archives, College Park, Md.